XI Small Business Innovative Research (SBIR) Hydrogen Program New Projects Awarded in FY 2005

The Small Business Innovation Research (SBIR) program provides small businesses with opportunities to participate in DOE research activities by exploring new and innovative approaches to achieve R&D objectives. The funds set aside for SBIR projects are used to support an annual competition for Phase I awards of up to $100,000 each for about 9 months to explore the feasibility of innovative concepts. Phase II is the principal research or R&D effort, and these awards are up to $750,000 over a two-year period. Small Business Technology Transfer (STTR) projects include substantial (at least 30%) cooperative research collaboration between the small business and a non-profit research institution.

Table 1 lists the SBIR projects awarded in FY 2005 related to the Hydrogen Program. On the following pages are brief descriptions of each.

Table 1. FY 2005 SBIR Projects Related to the Hydrogen Program

XI.1 Novel, High Capacity Hydrogen Storage System (Phase I Project)	Farasis Energy, Inc.	Hayward, CA
XI.2 Electrochemical Hydrogen Compressor (Phase I Project)	Analytic Power, LLC	Woburn, MA
XI.3 Oil-Free Hydrogen Compressor (Phase I Project)	Mohawk Innovative Technology, Inc.	Albany, NY
XI.4 Ultra-High Productivity Metal Membranes for Hydrogen Production Applications (STTR Phase I Project)	Hy9 Corporation	Woburn, MA
XI.5 Nano-Fabricated Hydrogen Separation Membranes (Phase I Project)	ITN Energy Systems, Inc.	Littleton, CO
XI.6 Dimensionally Stable High Performance Membrane (Phase I Project)	GINER, Inc.	Newton, MA
XI.7 Economical High Performance Thermoplastic Composite Bipolar Plates (STTR Phase I Project)	NanoSonic, Inc.	Christiansburg, VA
XI.8 Metal Hydride Slurry as a Novel Carrier of Hydrogen (Phase I Project)	TIAX, LLC	Cambridge, MA
XI.9 Novel, Low-Cost Solid Membrane Water Electrolyzer (Phase II Project)	GINER, Inc.	Newton, MA
XI.10 Complex Coolant Fluid for PEM Cell Systems (Phase II Project)	Advanced Fluid Technologies, Inc.	Whitehall, PA
XI.11 Cellulase Production and Increased Biomass in Multifunction Crop Plants (STTR Phase II Project)	Edenspace Systems Corporation	Chantilly, VA
XI.12 A High Efficiency PV to Hydrogen Energy System (Phase II Project)	Amonix, Inc.	Torrance, CA
XI.13 High-Efficiency, Ultra-High Pressure Electrolysis with Direct Linkage to Photovoltaic Arrays (Phase II Project)	Avalence, LLC	Milford, CT
XI.14 Hydrogen Recovery and Carbon Dioxide Separation In Steam Methane Reformers (Phase II Project)	Membrane Technology and Research, Inc.	Menlo Park, CA